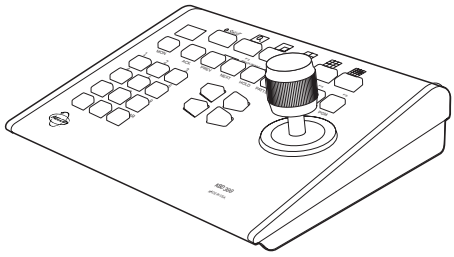

KBD300
Universal
Keyboard

Installation/
Operation Manual

C527M (11/97)

Pelco • 300 W. Pontiac Way, Clovis • CA 93612-5699 USA • Pelco Online @ http://www.pelco.com
In North America and Canada: Tel (800) 289-9100 or FAX (800) 289-9150 • DataFAX (800) 289-9108
International Customers: Tel (1-209) 292-1981 or FAX (1-209) 348-1120 • DataFAX (1-209) 292-0435

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REVISION HISTORY

Manual #	Date	Comments
C527M	11/97	Original version.

1.0 GENERAL

1.1 IMPORTANT SAFEGUARDS AND WARNINGS

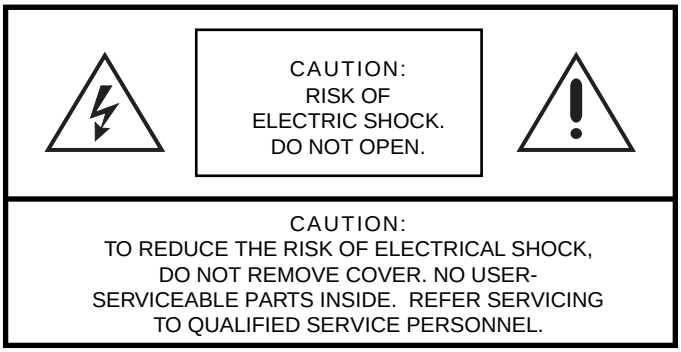
Prior to installation and use of this product, the following WARNINGS should be observed.

1. Installation and servicing should only be done by Qualified Service Personnel and conform to all Local codes.
2. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X ,6 or 6P enclosure, it is designed for Indoor use only and it must not be installed where exposed to rain and moisture.
3. Only use replacement parts recommended by Pelco.
4. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.

The product and/or manual may bear the following marks:

This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.

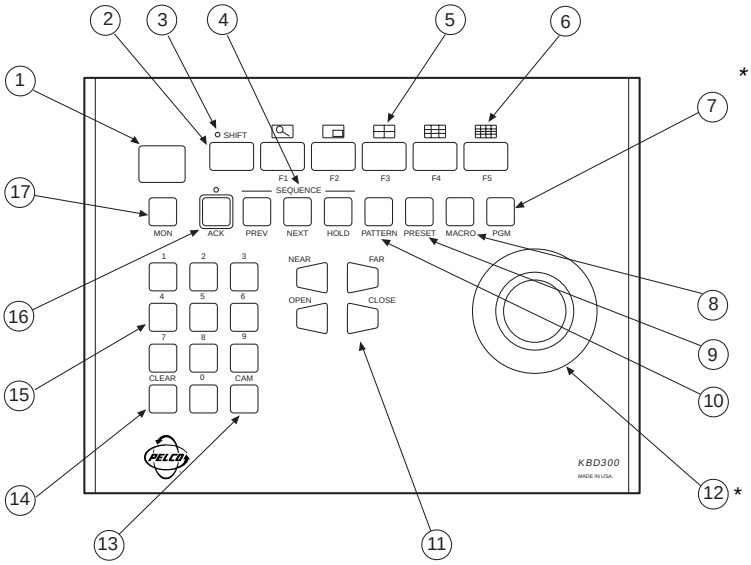
2.0 DESCRIPTION

The KBD300 keyboard provides complete programming and operational control of the CM6700 Matrix Switcher. This keyboard features a three axis joystick that includes a twisting, return-to-center head for full control of variable speed pan, tilt and zoom fuctions.

Included in this package:

Qty	Description	Pelco Part Number
1	KBD300 Keyboard, 120 VAC, or	KBD300
	KBD300 Keyboard, 230 VAC	KBD300-X
1	12 VAC wall mount transformer, 120 VAC, or	TRF112.0S.20
	12 VAC wall mount transformer, 230 VAC	TRF212.0S.25
1	RJ-45 modular wall jack	CON12J008Z03G0Z
1	Keyboard data cable	WIRA220122

See the CM6700 Installation/Operation Manual (C523M-A) for detailed operating instructions.



** The turbo pan feature may be disabled. Place switch 4 on the rear panel DIP switch block in the off position. See Figure 4.*

1. DIGIT DISPLAY LED Displays monitor number in Run mode and P in program mode.

2. SHIFT KEY Press to activate Multiplexer Mode.

3. SHIFT KEY LED Illuminates when Multiplexer Mode is active.

4. SEQUENCE KEYS
   When Sequence Status Indicator displays O on monitor (sequence not running and not on hold)
   PREVIOUS (PREV) Press to step backward through all available system cameras. Hold for two seconds to start a sequence in reverse.
   NEXT Press to step forward through all available system cameras. Hold for two seconds to start a sequence.
   HOLD No function.

   When Sequence Status Indicator displays F or B (sequence running forward or backward)
   PREVIOUS (PREV) Press to step backward through a sequence and/or reverse a forward sequence.
   NEXT Press to step forward through a sequence and/or reverse a backward sequence.
   HOLD Press to place a sequence on hold.

   When Sequence Status Indicator displays H (sequence on hold)
   PREVIOUS (PREV) Press to step backward through the camera sequence, including presets. Hold for two seconds to start a sequence in reverse.
   NEXT Press to step forward through the camera sequence. Hold for two seconds to start a sequence.
   HOLD No function.

5. FUNCTION KEYS, Normal Operation
   F1 Press to activate the NO/NC relay.
   F2 Press to activate the F2 open collector output.
   F3 Press to activate the F3 open collector output.
   F4 Press to activate a receiver/driver auxiliary for selected camera. Press and hold for momentary aux.
   F5 Press to deactivate a receiver/driver auxiliary for selected camera.

6. FUNCTION KEYS, Multiplexer Mode (Shift Key LED Illuminated)
   F1 Press to activate digital zoom.
   F2 Press to activate Picture in Picture.
   F3 Press to activate Quad display.
   F4 Press to activate Nine-screen display.
   F5 Press to activate 16-screen display.

7. PROGRAM KEY (PGM) Press to enter the program mode.

8. MACRO KEY Start a salvo sequence (macro 1 or 2) by first entering the macro number then pressing this key.

9. PRESET KEY Send a camera to a preset by first entering the preset number then pressing this key. Program a preset by first entering the preset number then holding the key for two seconds

10. PATTERN KEY Press to begin a pattern. Hold for two seconds to program a pattern.

11. LENS CONTROL KEYS Control camera lens functions; focus and iris.

12. PTZ FUNCTION JOYSTICK Variable speed, vector-solving, bi-directional joystick with twisting head zoom control. Turbo pan* is achieved by full joystick deflection in either pan direction.

13. CLEAR KEY Clear a numeric entry.

14. CAMERA KEY (CAM) Select a camera by first entering the camera number then pressing this key.

15. NUMBER PAD Enter numbers.

16. ALARM ACKNOWLEDGE (ACK) Press to acknowledge an alarm.

17. MONITOR KEY (MON) Select a monitor by first entering the monitor number then pressing this key.

Figure 1. KBD300 Keyboard Definitions

3.0 INSTALLATION

NOTE: *Refer to the CM6700 Installation/Operation Manual (C523M-A) for detailed operating instructions.*

Communication to the CM6700 keyboards is RS-485. Wall jack, modular data cable, and 12 VAC transformer (all supplied) combine to provide a local, single cable plug-in connection to the keyboard. A double-sided sticky pad, to secure the wall jack to a suitable surface, is also supplied.

All cabling between wall jacks is user supplied.

Maximum cable distance for RS-485 communication over 24-gauge wire is 4000 feet. For user supplied cable, Pelco recommends using shielded twisted pairs such as Belden 9843, or similar cable that meets or exceeds the basic requirements for EIA RS-485 applications.

3.1 WALL JACK WIRING

IMPORTANT: *Wall jacks must be wired in a daisy-chain configuration.*

1. Determine the location of all keyboards.
2. Run wall jack interconnect cable (user supplied) from the SCU to the closest keyboard location. Then to the next nearest location, and the next, etc.

   Wall jacks must be within 6 feet (1.8 m) of the nearest suitable electrical outlet. Do not mount the wall jack at this time.
3. Make cable connections between wall jacks according to Figure 2. All connections between **keyboard** wall jacks are one-to-one. Notice that Pin 5 is connected to Pin 4 between SCU wall jack and the first keyboard wall jack.
4. At each keyboard wall jack, wire a transformer to pins 5 and 6. Polarity is unimportant.
5. Secure the wall jack to a suitable surface.
6. Plug keyboard transformers into a suitable 115 VAC outlet.
7. Plug in all Data Cables according to Figure 3.

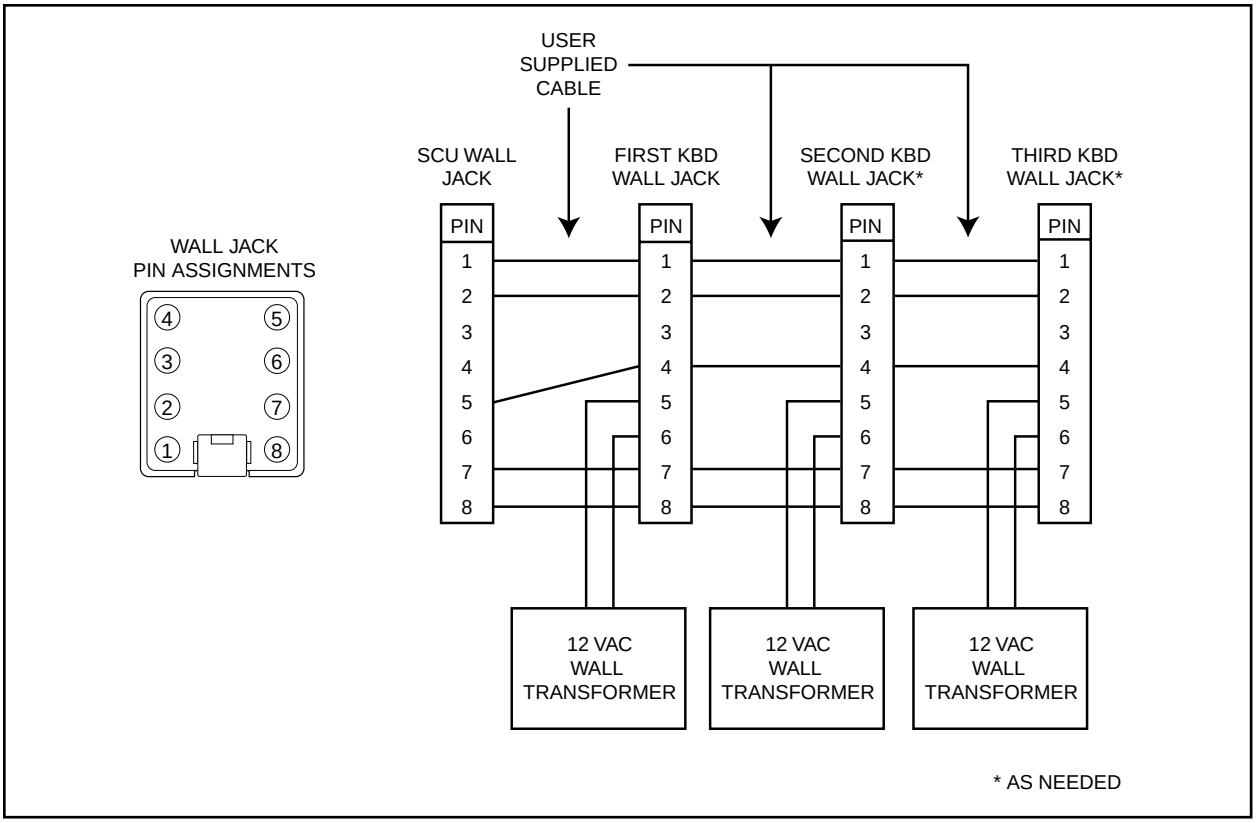


Figure 2. Wall Jack Wiring Schematic

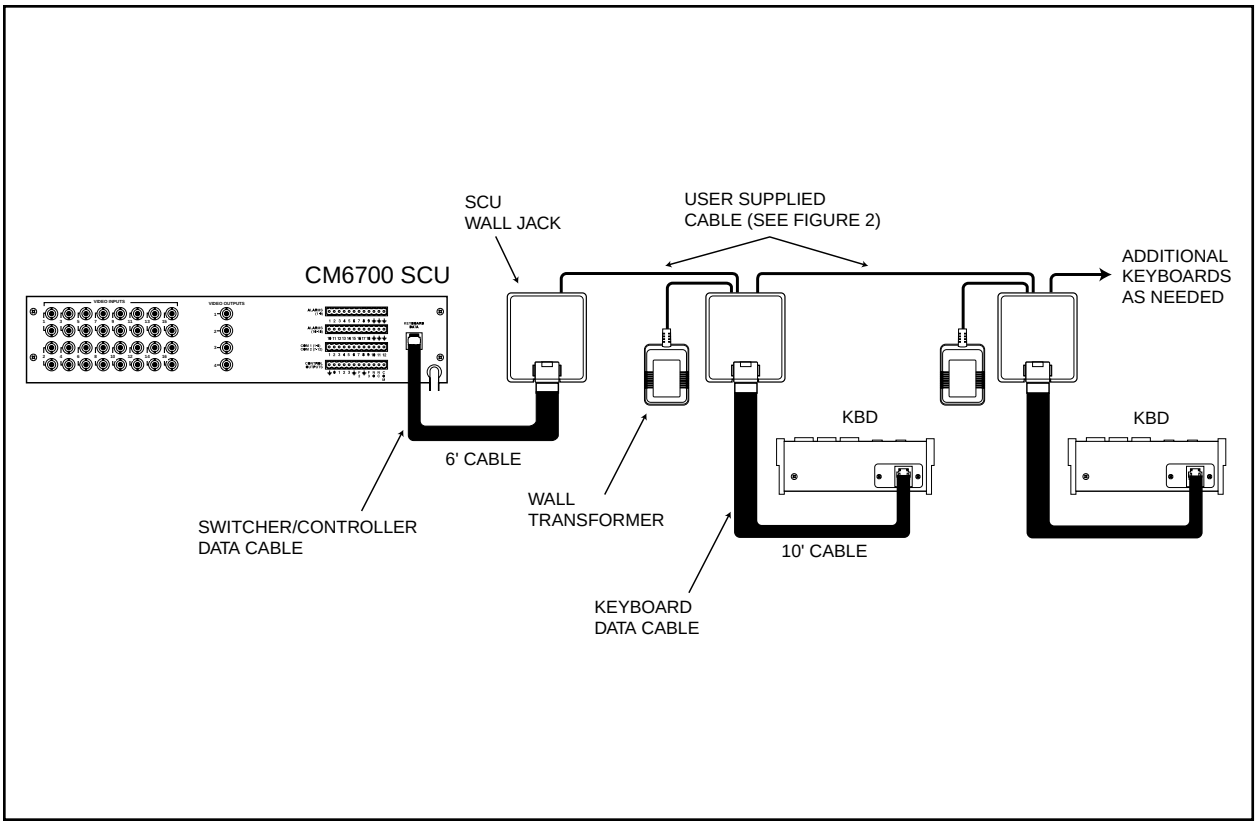


Figure 3. Keyboard Cabling Diagram

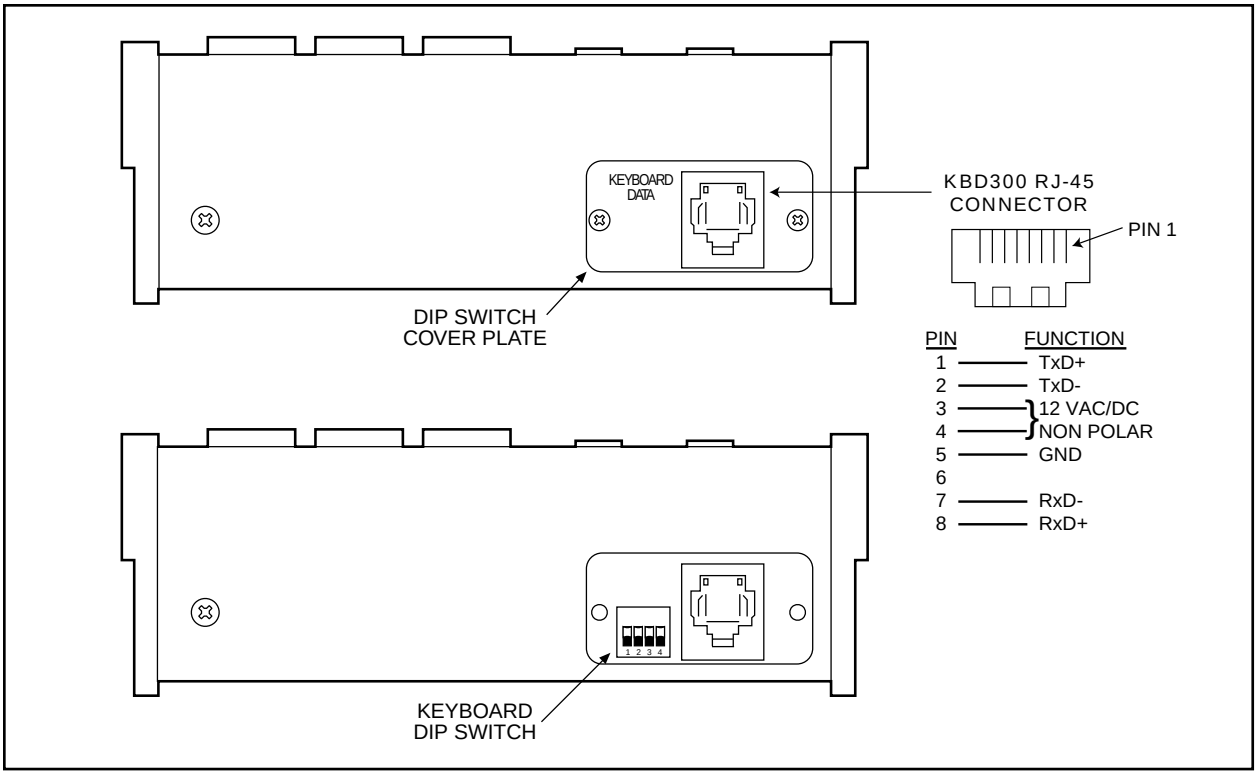


Figure 4. Keyboard Rear Panel

3.2 KEYBOARD ADDRESSING

NOTE: *Assign keyboard addresses logically, in ascending order, to avoid confusion when keyboard access to monitors is programmed. The address assigned determines the keyboard number in the access menu.*

Each keyboard in the system must have a different address. To make programming easier, address keyboards in ascending order.

Set the keyboard DIP switch address, refer to Figure 4.

1. Remove the two screws and the DIP switch cover plate from the rear of the keyboard.
2. Position the switches according to Table A.
3. Replace the cover plate.

Table A. Keyboard Addresses

Keyboard	Address	Switch Setting		
		1	2	3
1	0	OFF	OFF	OFF
2	1	ON	OFF	OFF
3	2	OFF	ON	OFF
4	3	ON	ON	OFF
5	4	OFF	OFF	ON
6	5	ON	OFF	ON
7	6	OFF	ON	ON
8	7	ON	ON	ON

Connect the keyboard to the wall jack using the 10-foot (1.8 m) modular cable (supplied).

Turbo Feature

The KBD300's turbo pan feature may be disabled by setting switch 4 on the rear panel DIP switch block in the off position. See Figure 4.

4.0 SPECIFICATIONS

Keyboard Keypad:	Mechanical
Joystick:	3 axis, vector solving, with twisting return-to-center head
7-Segment Digital Display:	Red LED, 2 cells
Shift Mode Indicator:	Green LED

Electrical

Input voltage:	12 VAC or ±12 VDC
Power Consumption:	1 watt
Ambient Operating Temperature:	20° to 120° F (-7° to 49° C)
Humidity:	10% - 90% non-condensing
Connector Type:	RJ-45 8-pin modular (female)

Keyboard Communication

Protocol:	RS-485
Baud Rate:	9600

General

Dimensions:	9.50" x 7.125" x 2.25" (24.13 cm x 18.1 cm x 5.72 cm)
Weight:	2.5 lbs (1.12 kg)

(Design and product specifications subject to change without notice.)

NOTES

5.0 WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship for a period of one (1) year after the date of shipment. Exceptions to this warranty are as noted below:

- Two (2) years on all standard motorized and fixed focal length lenses.
- Two (2) years on Legacy®, Intercept®, CM6700/CM8500/CM9500/CM9750/CM9760 Matrix, Spectra™, DF5 Series and DF8 Fixed Dome products.
- Two (2) years on WW5700 series window wiper (excluding wiper blades).
- Two (2) years on cameras.
- Six (6) months on all pan and tilts, scanners or preset lenses used in continuous motion applications (e.g., preset scan, tour and auto scan modes).

Pelco will warranty all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (209) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Ship freight prepaid to: Pelco
300 West Pontiac Way
Clovis, CA 93612-5699

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (209) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair). Goods returned for repair or credit should be clearly identified with the assigned CA/RA number and freight should be prepaid. All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Ship freight prepaid to: Pelco
300 West Pontiac Way
Clovis, CA 93612-5699

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